

Dr Watson's Act now to build winter turf strength



Turf plants in many areas of the UK have not had the time or growing conditions necessary for essential recovery after exceptionally the cold, slow start to the 2013 growing season - followed by the longest, driest summer for many years that has restricted growth.



Turf could be at even greater risk of disease attack and frost damage this winter, unless plants can be actively encouraged to build carbohydrate reserves over the autumn.

A Primo Maxx programme this autumn could help to stimulate development of essential plant carbohydrate reserves, which would enable turf to survive harsh winter conditions more effectively.

Greenkeepers will have to be especially diligent with their nutritional programmes and irrigation regimes to optimise turf health while growing conditions allow. Primo Maxx should be an integral part of the programme to promote healthy turf.

Retaining reserves

Trials have shown that Primo Maxx treatments can enhance turf health and vigour, demonstrated by:

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| 30% | | more chloroplasts |
| 30% | | more efficient light absorption |
| | | enhances photochemical efficiency in the leaf |
| 39% | | % increase in carbohydrate |

The increased carbohydrate build-up has been identified by:

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| 27% | | stronger roots |
| 2-3 | | times more tillering |
| | | increased turf density |
| | | improved leaf vigour and colour |

Research has shown the greater reserves of carbohydrates can be maintained right through the winter, with higher levels still recorded in plants seven months after the autumn Primo Maxx programmes.

The improved turf health and vigour associated with increased carbohydrate reserves also delivers better and more consistent playing surface quality.

Disease reduction

One of the key effects seen in trials in the Nordics - where winter conditions are highly conducive to disease - has been up to 70% reduction in the effects of Microdochium Patch over the winter when turf has been treated with Primo Maxx during the summer and autumn. This has been attributed to the improved carbohydrate reserves that ensure plants are stronger and healthier over the winter.

Best results have been achieved where turf is also protected with a fungicide programme, based on Banner Maxx in the autumn to prevent disease attack, followed by Medallion TL in late autumn and before winter snow cover to protect turf in high risk conditions.

Cutting mowing

Every time a turf leaf is cut, carbohydrates and chlorophyll is removed - which weakens the plant as it works to replenish the losses.

Primo Maxx effectively inhibits levels of gibberellic acid in the leaf, leading to a 30% reduction in daily leaf growth and consistently giving up to 50% reduction in clippings. It also leads to corresponding savings in time and associated costs of mowing turf.

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| UP TO 50% REDUCTION IN CLIPPINGS + IMPROVED ROOTING | MORE EFFICIENT UPTAKE AND UTILISATION OF NUTRIENTS | MORE EFFICIENT UPTAKE AND UTILISATION OF WATER |
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Reduced clipping removal and a greater root mass should also make more efficient use of fertiliser inputs and water - achieving better results from all autumn applications and ensuring turf is well prepared for the winter.

Primo Maxx is remarkably effective at reducing stress on the turf plant, which enables it to be healthier and stronger, ultimately making for better playing surface quality.



- Ensure turf has adequate nutrition in the autumn
- Prevent disease attacks that weaken the plant
- Aim to increase root mass
- Raise height of cut to increase light capture
- Maintain a full Primo Maxx programme during the autumn growing season to build carbohydrates